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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Barbara MacRae

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04/14/2008

LEE & HAYES, PLLC
421 W. RIVERSIDE AVE.
SUITE 500
SPOKANE, WA 99201

EXAMINER

AKINTOLA, OLABODE

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

04/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/976,403	Applicant(s) MACRAE ET AL.	
	Examiner OLABODE AKINTOLA	Art Unit 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 6, 2008 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1- 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (USPN 5544842) in view of Wetzter et al (USPN 6820038) and further in view of Fad et al (USPN 5793632).

Re claim 1, 10, 19 and 28: Smith teaches certification activity based on modification (col. 3, lines 61-67). Smith does not explicitly teach estimating man-hours and costs comprising: entering one or more components of the system involved in the modification; automatically identifying other components of the system that may be involved in the modification; determining which of the automatically identified other components of the system to include in the modification; determining at least one scope of work needed to complete regulatory certification for each of the entered and included other components; and generating an estimate of man-hours and costs needed to complete regulatory certification based on all of the determined scopes of work.

Wetzter teaches entering one or more components of the system involved in the maintenance, repair, and overhaul of equipment; automatically identifying other components of the system that may be involved in the maintenance, repair, and overhaul of equipment; determining which of the automatically identified other components of the system to include in the maintenance, repair, and overhaul of equipment (col. 7, lines 8-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Smith to include these steps as taught by Wetzter such that efficiencies may be realized in the replacing or modification of the components together.

Art Unit: 3691

Smith does not explicitly teach identifying which of the entered components and the included other components involved in the modification require regulatory certification activity based on the modification. However, Smith teaches that the modification of a component (both software and hardware) must have a “type certification” (TC) or (STC) (col. 2, lines 30-37; col. 3, lines 5-40). It would have been obvious to one of ordinary skill in the art to recognize that in addition to the entered components, other components involved in the maintenance or repair or modification (as taught by Wetzter) that require certification would be identified as required by FAA (see col. 3, lines 5-40).

Fad teaches generating an estimate of man-hours and costs needed to complete regulatory certification based on all of the determined scopes of work (col. 1, lines 17-18, col. 3, lines 14-22 and Figures). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Smith to include these steps. One would have been motivated to do this in order to determine the total cost of modifying the system to get it certified by a regulatory agency.

Re claims 2, 11, 20 and 29: Smith teaches wherein scope of work comprises one or more methods of compliance to be performed in order to satisfy one or more government regulations associated with the component (col. 3, lines 6-17).

Smith does not explicitly teach wherein the estimate includes estimated man-hours and costs for performing the one or more method of compliance. Official notice is hereby that this feature is old and well known. For example, it is well known that most DMVs/MVAs require vehicles to be inspected for roadworthiness by selected auto repair shops before registration. Depending on

Art Unit: 3691

the category of vehicles (SUVs, miniivans, or sedans), a fee, estimated by the auto repair shop based on the estimated man-hours required for such inspection, is charged for this service. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Smith to include this step in order to determine the total man-hours and costs for performing the method of compliance to get it certified by a regulatory agency.

Re claims 3, 12, 21 and 30: Smith teaches wherein the one or more methods comprises at least one of testing, demonstrating, simulating, analyzing, or inspecting (col. 3, lines 6-17).

Re claims 4, 13, 22 and 31: Smith teaches wherein the government regulations are one of federal aviation regulation or joint aviation requirement (col. 3, lines 6-17).

Re claims 5, 14, 23 and 32: Smith teaches wherein determining comprises supplying queries to a user, wherein the queries relate to applicability of an associated component (col. 4, lines 41-61).

Re claims 6, 15, 24 and 33: Smith teaches wherein the queries are at least one of a physical, spatial, functional, or safety query (col. 4, lines 41-61).

Re claims 7, 16, 25 and 34: Smith teaches wherein the system is an aircraft, wherein entering comprises entering aircraft model type affected by the modification, and wherein identifying is further based on the entered aircraft model type (col. 5, lines 30-47)

Art Unit: 3691

Re claims 8, 9, 17, 18, 26, 27 and 35-37: Smith does not explicitly teach identifying any certification deliverables based on the determined applicable components and associated scopes of work; and identifying government forms associated with the identified deliverables. Official notice is hereby taken that it is old and well known in the art to identify certification deliverables and identifying government forms associated to the deliverables. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Smith to include these steps. One would have been motivated to do so in order to obtain the certification on the modified system.

Support for this official notice can be found in Chakravarty et al (US 5161158) at col. 5, lines 50-53.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sandifer (USPN 6292806) teaches a computer aided maintenance and repair information system for equipment subject to regulatory compliance.

Foley (USPN 5249120) teaches an automated manufacturing costing system and method.

Natarajan (USPN 4887206) teaches an automated system for estimating impact on inventory cost due to an engineering change to a component.

Pan et al (USPN 5960417) teaches IC manufacturing costing control system and process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLABODE AKINTOLA whose telephone number is (571)272-3629. The examiner can normally be reached on M-F 8:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Hani M. Kazimi/
Primary Examiner, Art Unit 3691

Application/Control Number: 09/976,403
Art Unit: 3691

Page 8